Dual Benefits from Applications of Innovative Transportation Security Technologies

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Major Points

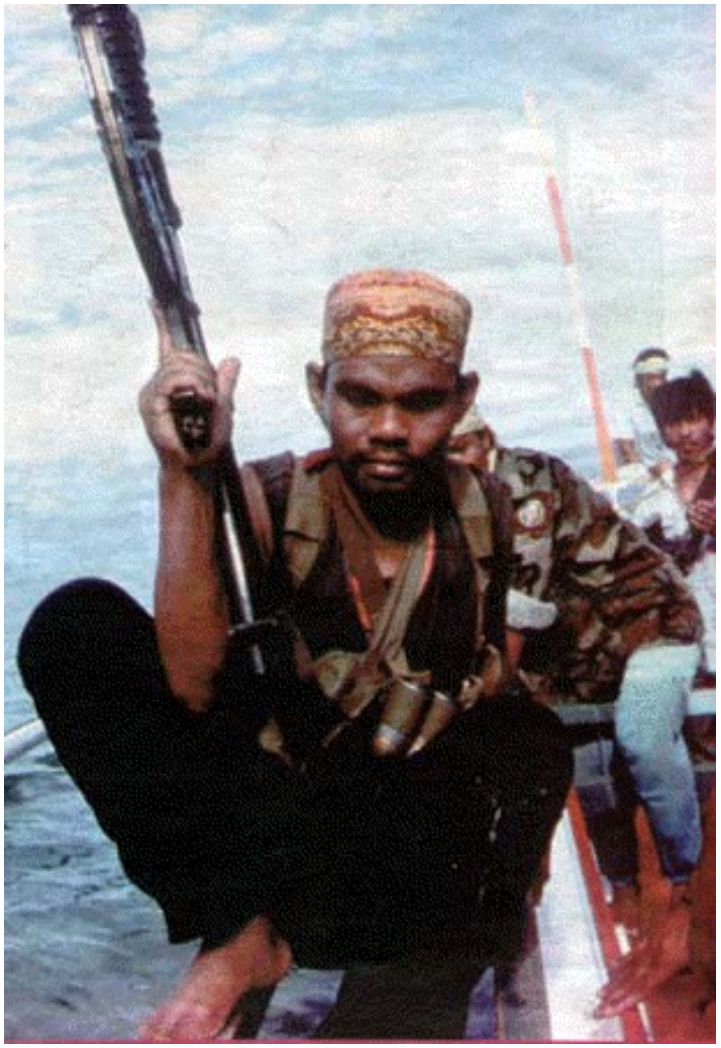
- Good security is good business… transportation security measures have quantifiable benefits
- Security measures can be designed to have "*dual benefits*"
  - Security
  - Operational Efficiency and Flexibility
  - Safety
  - Economic
  - Marketing

Security Measures Can Have Measurable Benefits

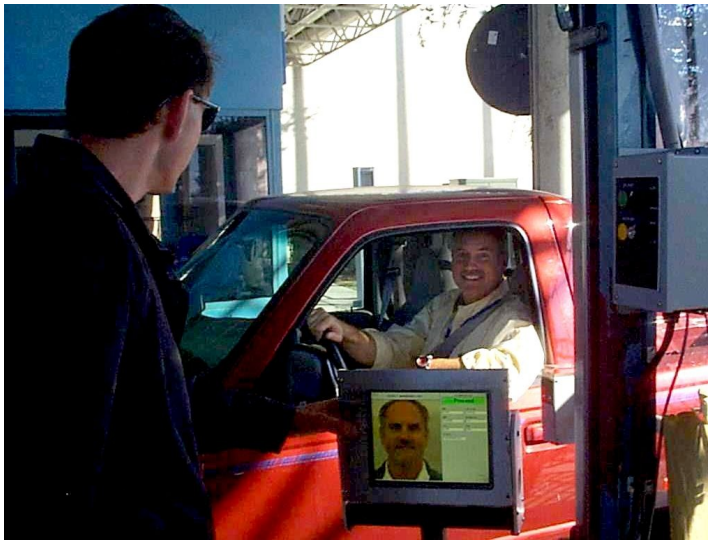
Example: Cargo Security

- $10M to $50M in cargo losses annually
- Need systems approach incorporating security technologies (e.g. locks, seals, tracking)
- Security Benefits:
  - Reduce theft
  - Avoid replacement costs and competition from stolen goods
  - Avoid increased insurance costs
  - Reduce risk of terrorism
    - Damage
    - Disruption
  - Maintain customers and brand integrity

Do You Know Who's Handling Your Cargo?



Credentialing & Access Control:
Security & Throughput



- Pre-register and vet employee or traveler
- Authenticate identity at entry point
- Increases throughput of pre-registered assets
- Focuses screening resources on higher risk assets
- Examples: US Mexican Commuter Lane, US/Canadian Trade Lanes, DoD Facility Gates, Rotterdam Cargo Card, Intermodal Port Entry Gates

Do You Know Where Your Cargo Is?

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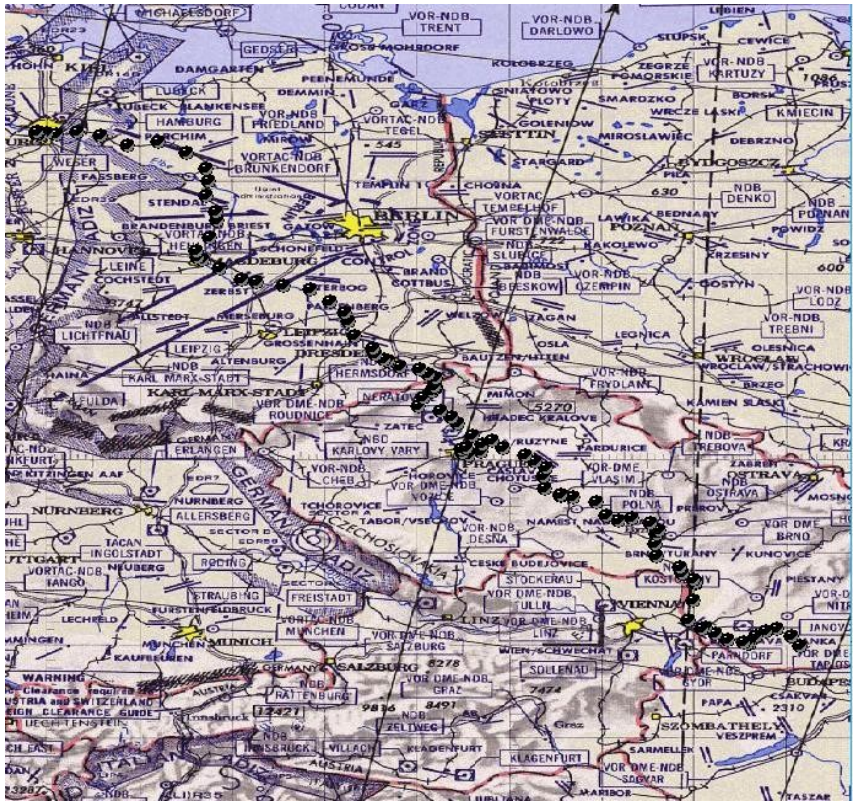
Shipment Monitoring:
Security & Productivity



- Route planning and shipment monitoring
- Support just-in-time logistics
- Identify secure carriers, corridors, stops and times
- Policies, procedures & contractual requirements
- Automated tracking of vehicles and containers
- Geo-fencing and alerts
- Tractor, chassis & container locks, seals and intrusion detection
- Improve vehicle security, vehicle and driver productivity

Do You Know What's In Your Container?

Do You Know What's In Your Container?

Shipment Screening
Security & Economic Benefits

- Target shipments based on risk
- Screen for explosives, nuclear material, drugs, illegal aliens, etc.
- Avoid potential damage and disruption from WMD
- Maintain brand integrity
- Enforce tariffs

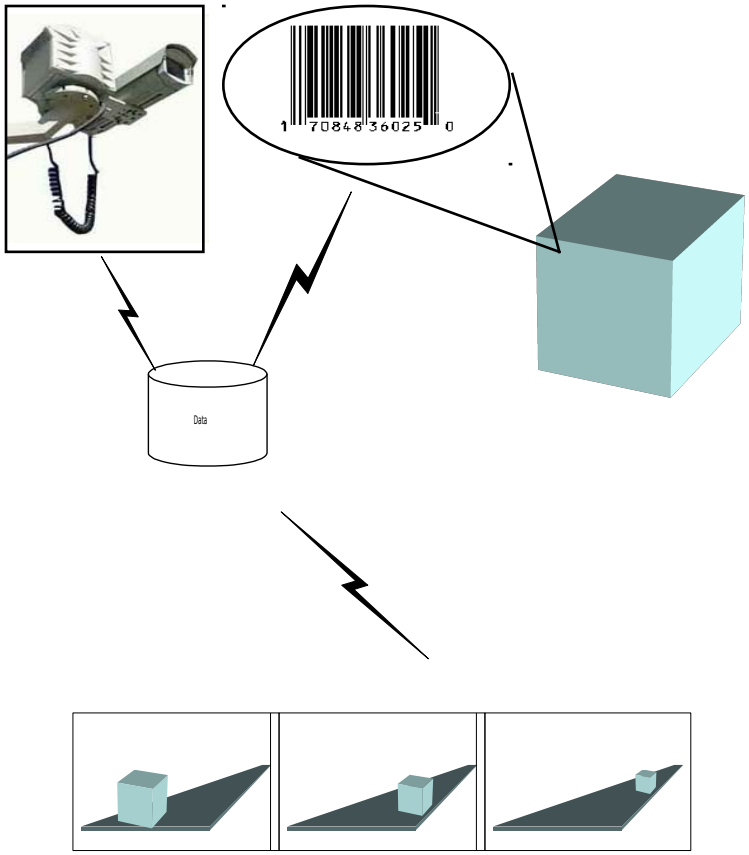
Surveillance and Monitoring

Security & Liability Management

- Digital video recording systems (DVRS) provide less costly and more reliable surveillance
- DVRS on board public transit vehicles have multiple benefits:
  - –Deter crime, vandalism and rowdyism
  - –Reduce fraudulent accident claims

Surveillance and Monitoring

Security, Safety, Marketing & Liability



- Behavioral recognition systems can identify specific movements on DVRS
- Can be linked with logistics data
- Potential security benefits; identify:
  - –Intrusions (including piggybacking, tailgating)
  - –Theft (including shop-lifting, auto theft)
  - –Unattended packages
- Additional benefits:
  - –Damage to goods in transit
  - –Safety (e.g. spills)
  - –Marketing (e.g. customer behavior)

Conclusions

- Supply chain integrity and security have many common elements
- A systems approach using innovative technologies can produce multiple benefits:
  - **Security**
  - **Operational Efficiency & Flexibility**
  - **Safety**
  - **Economic**
  - **Marketing**